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Attorney Docket No. BBC-077A \*EXPEDITED PROCEDURE\* \*REPLY UNDER 37 CFR 1.116\*

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

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IN RE APPLICATION OF:

Kevin P. Cusack et al.

APPLICATION NO.: 09/777.554

FILED: February 6, 2001

FOR: Benzothiazole Derivatives

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Mail Stop AF Commissioner for Patents P.O. Box 1450

Alexandria, VA 22313-1450

Sir:

EXAMINER: Gerstl, Robert ART UNIT: 1626

I hereby certify under 37 CFR 1.10 that this correspondence is being deposited with the United States Postal Service as Express Mail with sufficient postage on the date indicated below and is addressed to the Mail Stop AF. Commissioner for Patents, P.O. Box 1450, Alexandria, VA 2313.1450

Date of Deposit 1/1/03

John D. Conwood

## REPLY UNDER 37 C.F.R. §1.116

This is in reply to the Final Office Action mailed April 7, 2003, the period for response thereto having been set to expire on July 7, 2003.

## REMARKS

Reconsideration of the Final Office Action mailed April 7, 2003, (hereinafter "instant Office Action") and withdrawal of the rejection of claim 58, are respectfully requested.

In the instant Office Action, claims 1-60 are listed as pending, claims 1-57 are listed as withdrawn from consideration, claims 59 and 60 are listed as allowed and claim 58 is listed as rejected.

The Examiner has rejected claim 58 under 35 U.S.C. § 103(a) over U.S. 3,810,988 (hereinafter "Janiak"). The Examiner alleges that "the reference generically teaches the instant compounds and prepares numerous adjacent alkyl homologues as in ex. 3, 22, 25, 35, 36. Further exs. 10, 11, 13 and 14 are generically taught positional isomers of the instant claims and

would be obvious to one skilled in the art as biocides". Applicants respectfully traverse this rejection.

The Examiner has not established a *prima facie* case of obviousness. In order to establish a *prima facie* case of obviousness, first there must be some suggestion or motivation to modify the reference. The reference does not provide any suggestion or motivation to modify Janiak to arrive at Applicants' genus. Second, there must be a reasonable expectation of success. Janiak is directed to use of compounds as microbiocidal agents, whereas the instant application is directed to compounds and their use as kinase inhibitors, an entirely different and unrelated use. One of ordinary skill in the art of medicinal chemistry would not expect a biocide to be an effective kinase inhibitor. Applicants respectfully direct the Examiner's attention to <u>In re Oetiker</u>, 24 USPQ2d 1443 (1992), wherein the Court of Appeals for the Federal Circuit stated that:

In order to rely on a reference as a basis for rejection of the applicant's invention, the reference must either be in the field of the applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the inventor was concerned.

## In re Oetiker, 24 USPQ2d at 1445.

Applicants' compounds have a <u>completely different use</u> than the compounds in Janiak, i.e. kinase inhibitors as opposed to biocides. Further, one of ordinary skill in the art would not be motivated to look to Janiak for a suggestion of Applicants' Claim 58, since the two subject matters are in such divergent fields. Further, one of ordinary skill would not be motivated to look to Janiak for a suggestion of Applicants' Claim 58 since the two subject matters are in such divergent fields.

The Court of Appeals for the Federal Circuit has stated the following on the issue of obviousness:

Uniroyal, Inc. v. Rudkin-Wiley Corp., 837 F. 2d 1044, 1051-52, 5 USPQ 1434, 1438 (Fed. Cir. 1988), cert. denied, 109 S. Ct. 75 (1988), on remand, 13 USPQ2d 1192 (D. Conn. 1989) "Something in the prior art as a whole must suggest the desirability, and thus the obviousness, of making the combination."; In re Stencel, 828 F. 2d 751,755, 4 USPQ2d 1071, 1073 (Fed. Cir. 1987) obviousness cannot be established "by combining the teachings of the prior art to produce the claimed invention, absent some teaching or suggestion that the combination be made." Alco Standard Corp. v. Tennessee Valley Authority, 808 F. 2d 1490, 1498, 1 USPQ2d 1337, 1343 (Fed. Cir. 1986), cert. dismissed, 108 S. Ct. 26 (1987) "the question is not simply whether the prior art 'teaches' the particular element of the

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invention, but whether it would 'suggest the desirability, and thus the obviousness, of making the combination."; Carella v. Starlight Archery, 804 F. 2d 135,231 USPQ 644 (Fed. Cir. 1986); ACS Hospital Sys., Inc. v. Montefiore Hospital, 732 F. 2d 1572, 221 USPQ 929 (Fed. Cir. 1984) "Obviousness cannot be established by combining the teachings of the prior art to produce the claimed invention, absent some teaching or suggestion supporting the combination. Under section 103, teachings of references can be combined only if there is some suggestion or incentive to do so."

Donald S. Chisum, Patents, A Treatise on the Law of Patentability, Validity and Infringement, Vol. 2, 5-218, 1992.

In making a prima facie obviousness determination, an invention must be considered as a whole. In determining the differences between the prior art and the claims, the question under 35 U.S.C. §103 is not whether the differences themselves would have been obvious, but whether the claimed invention as a whole would have been obvious. Stratoflex, Inc. v. Aeroquip Corp., 713 F.2d 1530, 218 USPQ 871 (Fed. Cir. 1983); Schenck v. Nortron Corp., 713 F.2d 782, 218 USPQ 698 (Fed. Cir. 1983). The Examiner has not shown how Janiak renders obvious the entire genus of Applications' claim. Applicants maintain that Janiak does not render claim 58 obvious.

Even in a case where the structural similarity was close, the CAFC has stated that a definite suggestion is needed in order to make the modification to establish a *prima facie* case of obviousness. In In re Grabiak the CAFC stated that "there must be adequate support in the prior art for the ester/thioester change in structure, in order to complete the PTO's prima facie case and shift the burden of going forward to the applicant." In re Grabiak, 226 USPQ 870, 872, 1985.

The Grabiak court made the above statement in light of the fact that both appellant's compounds and the prior art compounds were very similar in structure (see below) and had the same utility, namely, as herbicidal safeners.

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Grabiak's Compound:

wherein R is C1-5 alkyl, phenyl or benzyl

Howe's (prior art) Compound:

Note that when the R substituent is ethyl in the Grabiak compound, that the only difference in structure between Grabiak and Howe is a single atom, namely, an oxygen atom versus a sulfur atom. Hence, structural similarity and identical utility on its own cannot be the sole basis for a rejection under 35 U.S.C. § 103. Yet, the Examiner's rejection in the instant application under 35 U.S.C. § 103 does just that, except that in the instant case, there is only structural similarity.

Janiak does not teach or suggest all of the limitations of Applicants' claims. First as to the Examiner's contention that Examples 3, 22, 25, 35, and 36 of Janiak are alkyl homologues of the genus in Applicants' Claim 58, Applicants' genus is very limited. With respect to Example 3 of Janiak, it does not contain the urea portion of Applicants' genus. With respect to Examples 22 and 25 of Janiak, R in Janiak is methyl, whereas the corresponding portion in Applicants' genus is limited to ethyl. Examples 35 and 36 of Janiak contain propyl in this position. None of these examples suggests or teaches the genus in Applicants' Claim 58.

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The Examiner alleges that examples 10, 11, 13 and 14 are "generically taught positional isomers" of the instant claims. Janiak's example 10 contains alkoxy at its R' position, which corresponds to Applicants' R2 position. Applicants' R2 cannot be 4-OCH3. Janiak's example 11 contains chlorine at its R' position, which corresponds to Applicants' R1. Applicant's R1 cannot be chlorine. Janiak's example 13 contains an alkoxy at its R' position, which corresponds to Applicants' R2 position. Applicants' R2 cannot be alkoxy. Janiak's example 14 contains chlorine at its R''' position, which corresponds to Applicants' W position. W cannot be chlorine in Applicants' genus. Thus, none of these examples suggests or teaches the genus in Applicants' Claim 58.

Simply because Applicants' Claim 58 slightly overlaps with the broad genus disclosed by Janiak does not establish a *prima facie* case of obviousness for the entire genus of Claim 58.

Based upon the foregoing, the rejection of claim 58 under 35 U.S.C. §103(a) is obviated and should be withdrawn.

No fees are due for the instant amendment since the total number of claims after entry of the amendments hereinabove is not more than the total number of claims that Applicants have paid for to date.

Based upon the foregoing, Applicants believe that claims 58-60 are in condition for allowance. Prompt and favorable action is earnestly solicited.

If the Examiner believes that a telephone conference would advance the condition of the instant application for allowance, Applicants invite the Examiner to call Applicants' agent at the number noted below.

Date: July 7, 2003

Respectfully submitted,

Gayle B. O'Brien Agent for Applicants Reg. No. 48, 812

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